

THE OFFICE OF REGULATORY STAFF

DIRECT TESTIMONY

OF

WILLIE J. MORGAN, P.E.

MAY 22, 2013



DOCKET NO. 2012-383-WS

**Application of Carolina Water Service,
Incorporated for Approval of a Bulk Sewer
Service Agreement between Carolina Water
Service, Incorporated and Utilities,
Incorporated and Georgetown County Water
and Sewer District**

DIRECT TESTIMONY OF WILLIE J. MORGAN, P.E.

FOR

THE OFFICE OF REGULATORY STAFF

DOCKET NO. 2012-383-WS

IN RE: APPLICATION OF CAROLINA WATER SERVICE, INCORPORATED

FOR APPROVAL OF A BULK SEWER SERVICE AGREEMENT BETWEEN

CAROLINA WATER SERVICE, INCORPORATED AND UTILITIES,

INCORPORATED AND GEORGETOWN COUNTY WATER AND SEWER

DISTRICT

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Willie J. Morgan, and my business address is 1401 Main Street, Suite 900, Columbia, South Carolina 29201. I am employed by the South Carolina Office of Regulatory Staff (“ORS”) as the Program Manager for the Water and Wastewater Department.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received a Bachelor of Science Degree in Engineering from the University of South Carolina in 1985 and a Master of Arts Degree in Management from Webster University in 2000. I am a licensed Professional Engineer registered in the State of South Carolina and have completed the Certified Public Manager Program. My professional affiliations include membership in the

1 American Water Works Association, the South Carolina Section of the American
2 Water Works Association and the National Society of Professional Engineers.
3 Also, I have served as a Director for the Columbia Chapter of the South Carolina
4 Society of Professional Engineers. After graduating from the University of South
5 Carolina, I was employed by the South Carolina Department of Health and
6 Environmental Control (“DHEC”) as an Environmental Engineer Associate.
7 Later, I was promoted to the position of Permitting Liaison where I assisted
8 industries and the public with environmental permitting requirements in the State
9 of South Carolina. This assistance included providing information about air
10 quality, solid and hazardous waste management, and water and wastewater
11 management requirements. I was employed by DHEC for nineteen years. In
12 October 2004, I joined ORS as the Program Manager for the Water and
13 Wastewater Department.

14 **Q. HOW LONG HAVE YOU PROVIDED REGULATORY OVERSIGHT**
15 **AND ENGINEERING SERVICES TO WATER AND WASTEWATER**
16 **FACILITIES?**

17 A. I have over twenty-seven years of regulatory compliance experience
18 providing assistance and regulatory oversight for water and wastewater facilities
19 and services.

20 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
21 **PROCEEDING?**

22 A. The purpose of my testimony is to set forth the ORS staff findings relative
23 to the bulk sewer service agreement approval request by Carolina Water Service,

1 Inc. (“CWS”) for its sewer system in Georgetown County. Specifically, I will
2 focus on the impact of the interconnection on customer bills, collection and
3 treatment system review, and ORS’s concerns about the impact to all CWS’s
4 ratepayers.

5 **Q. PLEASE IDENTIFY THE CONCERNS ORS HAS ABOUT CWS’S**
6 **PROPOSED INTERCONNECTION WITH GEORGETOWN COUNTY**
7 **WATER AND SEWER DISTRICT.**

8 A. ORS has many concerns regarding the proposed application that was
9 submitted by CWS:

- 10 1. The agreement, as structured between CWS and Georgetown
11 County Water and Sewer District (“GCWSD”), could cause the
12 monthly sewer rate to the existing customers of the Whitescreek
13 and Lincolnshire communities to more than double depending on
14 the monthly sewer flow. CWS is currently billing customers in the
15 Whitescreek and Lincolnshire communities a rate of \$40.56 per
16 month. If the application as presented to the Public Service
17 Commission of South Carolina (“Commission”) is approved, then
18 based on the monthly sewer flow reported by CWS in the past
19 three years (January 2010 through January 2013) these same
20 customers could see monthly sewer bills in excess of \$100. See
21 Exhibit WJM-1.
- 22 2. Given the historical sewer flow as measured at the WWTP, the
23 Whitescreek and Lincolnshire communities could be subject to

1 possible Sanitary Sewer Overflows (“SSO”) released at the pump
2 station near the site of the existing WWTP. The agreement
3 submitted with the application would require GCWSD to provide
4 an interceptor sewer transmission main sufficient to provide CWS
5 with only 152,000 gallons of wastewater capacity per day. Based
6 on the data as provided by CWS to ORS, CWS exceeded this
7 152,000 flow capacity on many occasions in the past 36 months.
8 See Exhibit WJM-2.

- 9 3. CWS has failed to address the continuing problem of
10 inflow/infiltration (“I&I”) within its collection system. ORS
11 agrees with DHEC’s opinion that CWS has not provided enough
12 data to determine that any one specific source is a major
13 contributor to the collection system I&I problem or to identify the
14 specific locations in the collection system that CWS should focus
15 its infrastructure repair and maintenance efforts. While CWS has
16 completed some work on the collection system, their effort appears
17 to have been focused on the 10 and 12 inch mains that feed the lift
18 station at the WWTP. Based on the information provided to ORS,
19 the utility has completed few inspections and maintenance work on
20 the service laterals throughout the collection system that feed into
21 the 10 and 12 inch mains.
- 22 4. The proposed application and agreement with GCWSD requires
23 existing ratepayers to absorb the cost of service for future or new

1 customers. There are only 253 active customers in Whitescreek
2 and Lincolnshire communities according to the information
3 provided to the ORS by CWS. 274 single family homes exist in
4 the Whitescreek and Lincolnshire communities and they occupy
5 275 lots. CWS is requesting approval of an agreement that
6 obligates its ratepayers for 300 lots or 300 REUs (“Residential
7 Equivalent Unit”). CWS’s current tariff places all cost of this
8 nature on future or new customers:

9 The Utility shall have no obligation at its expense to extend its
10 utility service lines or mains in order to permit any customer to
11 discharge acceptable wastewater into one of its sewer systems.
12 However, anyone or any entity which is willing to pay all costs
13 associated with extending an appropriately sized and
14 constructed main or utility service line from his/her/its
15 premises to an appropriate connection point, to pay the
16 appropriate fees and charges set forth in this rate schedule and
17 to comply with the guidelines and standards hereof, shall not
18 be denied service, unless treatment capacity is unavailable or
19 unless the South Carolina Department of Health and
20 Environmental Control or other government entity has
21 restricted the Utility from adding for any reason additional
22 customers to the serving sewer system.

23
24 In no event will the Utility be required to construct additional
25 wastewater treatment capacity to serve any customer or entity
26 without an agreement acceptable to the Utility first having been
27 reached for the payment of all costs associated with adding
28 wastewater treatment capacity to the affected sewer system.
29

30 **Q. PLEASE DISCUSS YOUR FINDINGS RELATED TO SEWER INFLOW**
31 **AND INFILTRATION IN THE WHITESCREEK AND LINCOLNSHIRE**
32 **COMMUNITIES.**

1 A. As stated in my testimony for the most recent rate case for CWS in Docket
2 No. 2011-47-WS, during the ORS site inspection conducted on July 26, 2011, the
3 flow at the CWS sewer system in Georgetown (Lincolnshire SC0030732) was not
4 normal. Historically, the CWS sewer system in Georgetown has had excessive
5 I&I which severely impacts the treatment plant's ability to remain in compliance
6 with the National Pollutant Discharge Elimination System ("NPDES") permit.
7 CWS has not made progress in the wastewater collection system to reduce the
8 excessive I&I since the 2006 rate case (Docket No. 2006-92-WS). Based on
9 information received from CWS, the monthly average sewer flow from the
10 WWTP was as high as 206,000 gallons per day as reported by CWS for January
11 2013. See Exhibit WJM-2. The increased flow is attributed to significant I&I in
12 the collection system during wet weather events and when the groundwater table
13 is high. ORS renews its recommendation that CWS conduct a feasibility study
14 and develop and implement a manageable plan to mitigate the excessive I&I in its
15 collection system serving the Whitescreek and Lincolnshire communities.

16 **Q HAS ORS MET WITH DHEC AND CWS TO DISCUSS THE IMPACT TO**
17 **CUSTOMERS IF THE INTERCONNECTION AS PROPOSED IN THE**
18 **APPLICATION WERE APPROVED BY THE COMMISSION?**

19 A. Yes. On April 12, 2013, ORS met with representatives of CWS via
20 conference call to discuss the potential impact to customers following
21 interconnection. On May 3, 2013, ORS met jointly with DHEC and CWS to
22 discuss the customer impact. During both meetings, ORS emphasized the fact
23 that the monthly flow from the sewer system remained a concern as it could cause

1 customer's monthly sewer bills to exceed \$100 and render service unaffordable.
2 During the increased rain events of January 2013, CWS's data demonstrated a
3 sudden increase in the sewer flow. The monthly average flow from the WWTP
4 was noted by CWS as 206,000 gallons per day. See Exhibit WJM-3. While ORS
5 and CWS remain in disagreement over the calculation of the customer monthly
6 charges, using CWS's method for a monthly average daily flow, the customer's
7 monthly bill for January 2013 would be \$105.05. See Exhibit WJM-4. This
8 monthly charge for sewer service would be one of the highest for a residential
9 customer of all the private investor-owned utilities regulated by the Commission.

10 **Q. DOES ORS RECOMMEND THE COMMISSION APPROVE THE**
11 **INTERCONNECTION AGREEMENT AS PROPOSED BY CWS?**

12 A. No. While ORS agrees that the elimination of the discharge point
13 associated with the WWTP would be in the best interest for the environment, the
14 application as proposed by CWS is not in the public interest. As the Commission
15 did in Order No. 2001-360 in Docket No. 2000-511-S, I recommend that the
16 application and agreement submitted with the application be denied. See Exhibit
17 WJM-5. CWS has failed to address I&I problems with its collection system.

18 **Q. PLEASE DESCRIBE THE COMPLAINTS ORS HAS RECEIVED FROM**
19 **CUSTOMERS OF CWS'S WHITESCREEK AND LINCOLNSHIRE**
20 **COMMUNITIES.**

21 A. ORS has received three complaints from customers in the Whitescreek and
22 Lincolnshire communities during the past 36 months. Two of these complaints
23 involved customers' inability to pay their monthly charges. The customers had

1 been disconnected for non-payment. ORS assisted in obtaining reconnection of
2 service for these customers.

3 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

4 **A. Yes it does.**

Number of active CWS Whitescreek/Lincolnshire customers:	253
Number of Lots in Whitescreek/Lincolnshire community:	300

EXAMPLE 1

<u>CWS WWTP:</u>	
CWS current rate to Whitescreek/Lincolnshire customers	\$40.56 per unit

EXAMPLE 2

CWS with Georgetown Water & Sewer PSD Treating Wastewater:		
(Month with average daily flow at ->	70,000 gallons)	
(Equivalent total monthly flow ----->	2,100,000 gallons)	
CWS current rate to Whitescreek/Lincolnshire customer	\$26.73 per unit	Approved PSC rate
GCWSD base charge to CWS	\$0.02 per unit	\$5.93 / 253 active customers
GCWSD Availability Fees	\$4.43 per unit	\$3.74 * 300 / 253 Rate
Calculated average active Whitescreek/Lincolnshire customer volumetric use	8,300 gallons per month	2,100,000 gallons / 253 active customers
GCWSD volumetric flow received from CWS	2,100,000 gallons per month	
(Only valid for volume up to 2,100,000 gallons per month)		
GCWSD rate using volumetric flow received from CWS	2,100,000 gallons per month is	
	\$1.99 per 1,000 gallons at Tier I Rate	
Calculated customer volumetric charge	\$16.52 per unit	(2,100,000 gallons * (\$1.99 / 1000 gallons)) / 253 customers
TOTAL SEWER CHARGE WITH GW&S PSD TREATING SEWER	\$47.70 per unit	

EXAMPLE 3

CWS with Georgetown Water & Sewer PSD Treating Wastewater:		
(Month with average daily flow at ->	183,000 gallons)	
(Equivalent total monthly flow ----->	5,490,000 gallons)	
CWS current rate to Whitescreek/Lincolnshire customer		
	\$26.73 per unit	Approved PSC rate
GCWSD base charge to CWS	\$0.02 per unit	\$5.93 / 253 active customers
GCWSD Availability Fees	\$4.43 per unit	\$3.74 * 300 / 253 Rate
Calculated average active Whitescreek/Lincolnshire customer volumetric use		
21,700 gallons per month		5,490,000 gallons / 253 active customers
GCWSD volumetric flow received from CWS		
5,490,000 gallons per month		
(Only valid for volume above 2,100,000 gallons and not over 8,400,000 gallons per month)		
GCWSD rate using volumetric flow received from CWS		
2,100,000 gallons per month is		
\$1.99 per 1,000 gallons at Tier I Rate		
3,390,000		
\$3.33 per 1,000 gallons at Tier II Rate		
Calculated customer volumetric charge for		
2,100,000 gallons per month	\$16.52 per unit	(2,100,000 gallons * (\$1.99 / 1000 gallons)) / 253 customers
3,390,000 gallons per month	\$44.62 per unit	(3,390,000 gallons * (\$3.33 / 1000 gallons)) / 253 customers
GCWSD Sewer Demand Rate		
\$7.28 per REU in excess of purchased capacity		
Sewer Demand Charge		
(Charge triggered when calculated volumetric amount exceeds 152,000 gallons per day or 4,560,000 gallons per month)		
	\$17.70 per unit	((((5490000 - (300 * 6000)) / 6000 gallons) * \$7.28) / 253 customers
GCWSD Availability Fee		
\$3.74 per REU in excess of purchased capacity		
Sewer Availability Fee		
(Charge triggered when calculated volumetric amount exceeds 152,000 gallons per day or 4,560,000 gallons per month)		
	\$9.09 per unit	((((5490000 - (300 * 6000)) / 6000 gallons) * \$3.74) / 253 customers
TOTAL SEWER CHARGE WITH GW&S PSD TREATING SEWER		
	\$119.11 per unit	

Flow Summary Data

Docket No. 2012-383-WS

Year	Month	Monthly Average Flow (mgd)	Maximum Daily Flow (mgd)
2010	January	0.183	0.332
	February	0.181	0.282
	March	0.146	0.250
	April	0.101	0.175
	May	0.098	0.162
	June	0.072	0.088
	July	0.082	0.194
	August	0.127	0.247
	September	0.095	0.358
	October	0.106	0.191
	November	0.073	0.080
	December	0.083	0.120
2011	January	0.107	0.124
	February	0.161	0.347
	March	0.100	0.204
	April	0.134	0.197
	May	0.094	0.147
	June	0.069	0.075
	July	0.083	0.216
	August	0.083	0.124
	September	0.095	0.340
	October	0.094	0.162
	November	0.079	0.121
	December	0.068	0.093
2012	January	0.059	0.070
	February	0.064	0.091
	March	0.103	0.282
	April	0.068	0.091
	May	0.066	0.100
	June	0.091	0.209
	July	0.095	0.209
	August	0.104	0.290
	September	0.098	0.180
	October	0.066	0.074
	November	0.074	0.108
	December	0.088	0.186
2013	January	0.206	
	February	0.133	
ANNUAL AVERAGE		0.101	0.181
LOWEST MONTHLY AVG		0.059	0.070
MAX VALUE		0.206	0.358

	Annual Average Daily Flow (mgd)	Maximum Daily Flow (mgd)
2010	0.112	0.358
2011	0.097	0.347
2012	0.081	0.290
2013	0.170	

Carolina Water Service, Inc.
 Exhibit 1.19 Lincolnshire Whites Creek WWTP Flow Data Revised
 Docket No. 2012-383-WS

Exhibit WJM-3

CAROLINA WATER SERVICE, INC.
 DOCKET NO. 2012-383-WS
 EXHIBIT 1.19 LINCOLNSHIRE WHITES CREEK WWTP FLOW DATA
 AS OF DECEMBER 31, 2012

YEAR	2012			2011			2010			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	MoAvg	MoAvg	MoAvg	MoAvg	MoAvg	MoAvg	MoVolume	Tier I vol	(A) - (B) Tier II vol	275 units T I cost	275 units TII cost	(D) + (E) TI + TII	275 units CustChg	275 units AvailCh	Flat Rate CollSyst	Total	GC Worksheet MoFlow	Cust Cost	Difference			
January	0.059	0.107	0.183	1,832,100	1,832,100	-	\$ 13.26	\$ -	\$ 13.26	0.02	4.08	26.73	\$ 44.09	1,829,000	44.07	0.02						
February	0.064	0.161	0.181	1,850,200	1,850,200	-	\$ 13.39	\$ -	\$ 13.39	0.02	4.08	26.73	\$ 44.22	2,884,000	54.83	-10.61						
March	0.103	0.100	0.146	3,189,900	2,100,000	1,089,900	\$ 15.20	\$ 13.20	\$ 28.39	0.02	4.08	26.73	\$ 59.23	3,193,000	59.26	-0.03						
April	0.068	0.134	0.101	2,046,000	2,046,000	-	\$ 14.81	\$ -	\$ 14.81	0.02	4.08	26.73	\$ 45.64	2,040,000	45.59	0.05						
May	0.066	0.094	0.098	2,055,300	2,055,300	-	\$ 14.87	\$ -	\$ 14.87	0.02	4.08	26.73	\$ 45.70	2,046,000	45.64	0.06						
June	0.091	0.069	0.072	2,736,000	2,100,000	636,000	\$ 15.20	\$ 7.70	\$ 22.90	0.02	4.08	26.73	\$ 53.73	2,730,000	53.66	0.07						
July	0.095	0.083	0.082	2,951,200	2,100,000	851,200	\$ 15.20	\$ 10.31	\$ 25.50	0.02	4.08	26.73	\$ 56.34	2,945,000	56.26	0.08						
August	0.104	0.083	0.127	3,230,200	2,100,000	1,130,200	\$ 15.20	\$ 13.69	\$ 28.88	0.02	4.08	26.73	\$ 59.71	3,224,000	59.64	0.07						
September	0.098	0.095	0.095	2,925,000	2,100,000	825,000	\$ 15.20	\$ 9.99	\$ 25.19	0.02	4.08	26.73	\$ 56.02	2,940,000	56.20	-0.18						
October	0.066	0.094	0.106	2,052,200	2,052,200	-	\$ 14.85	\$ -	\$ 14.85	0.02	4.08	26.73	\$ 45.68	2,046,000	45.64	0.04						
November	0.074	0.079	0.073	2,205,000	2,100,000	105,000	\$ 15.20	\$ 1.27	\$ 16.47	0.02	4.08	26.73	\$ 47.30	2,220,000	47.48	-0.18						
December	0.088	0.068	0.083	2,724,900	2,100,000	624,900	\$ 15.20	\$ 7.57	\$ 22.76	0.02	4.08	26.73	\$ 53.59	2,728,000	53.63	-0.04						
AVERAGE	0.081	0.097	0.112	29,798,000	24,535,800	5,262,200	\$ 14.80	\$ 5.31	\$ 20.11	\$ 0.02	\$ 4.08	\$ 26.73	\$ 50.94			\$ (10.65)						
LOWEST MONTHLY AVG	0.059	0.068	0.072													\$ (0.89)						

2013
 January 0.206
 February 0.133

MoVolume	Tier I vol	(A) - (B) Tier II vol	250 units T I cost	250 units TII cost	(D) + (E) TI + TII	250 units CustChg	250 units AvailCh	Flat Rate CollSyst	Total
1,850,200	1,850,200	-	\$ 14.73	\$ -	\$ 14.73	0.02	4.49	26.73	\$ 45.97
3,189,900	2,100,000	1,089,900	\$ 16.72	\$ 14.52	\$ 31.23	0.02	4.49	26.73	\$ 62.48
2,046,000	2,046,000	-	\$ 16.29	\$ -	\$ 16.29	0.02	4.49	26.73	\$ 47.53
2,055,300	2,055,300	-	\$ 16.36	\$ -	\$ 16.36	0.02	4.49	26.73	\$ 47.60
2,736,000	2,100,000	636,000	\$ 16.72	\$ 8.47	\$ 25.19	0.02	4.49	26.73	\$ 56.43
2,951,200	2,100,000	851,200	\$ 16.72	\$ 11.34	\$ 28.05	0.02	4.49	26.73	\$ 59.30
3,230,200	2,100,000	1,130,200	\$ 16.72	\$ 15.05	\$ 31.77	0.02	4.49	26.73	\$ 63.01
2,925,000	2,100,000	825,000	\$ 16.72	\$ 10.99	\$ 27.71	0.02	4.49	26.73	\$ 58.95
2,052,200	2,052,200	-	\$ 16.34	\$ -	\$ 16.34	0.02	4.49	26.73	\$ 47.58
2,205,000	2,100,000	105,000	\$ 16.72	\$ 1.40	\$ 18.11	0.02	4.49	26.73	\$ 49.36
2,724,900	2,100,000	624,900	\$ 16.72	\$ 8.32	\$ 25.04	0.02	4.49	26.73	\$ 56.28
TOTAL	29,798,000	24,535,800	5,262,200						
AVERAGE			\$ 16.28	\$ 5.84	\$ 22.12	\$ 0.02	\$ 4.49	\$ 26.73	\$ 53.36

Carolina Water Service, Inc.
 Exhibit 1.19 Lincolnshire Whites Creek WWTP Flow Data Revised
 Docket No. 2012-383-WS

Exhibit WJM-4

CAROLINA WATER SERVICE, INC.
 DOCKET NO. 2012-383-WS
 EXHIBIT 1.19 LINCOLNSHIRE WHITES CREEK WWTP FLOW DATA
 AS OF DECEMBER 31, 2012

YEAR	2012			2011			2010			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	MoVolum	Tier I vol	(A) - (B) Tier II vol	275 units T I cost	275 units TII cost	(D) + (E) TI + TII	275 units CustChg	275 units AvailCh	Flat Rate CollSyst	Total	GC Worksheet MoFlow	Cust Cost	Difference									
Month / Flow (mgd)	MoAvg	MoAvg	MoAvg																			
January	0.059	0.107	0.183	1,832,100	1,832,100	-	\$ 13.26	\$ -	\$ 13.26	0.02	4.08	26.73	\$ 44.09	1,829,000	44.07	0.02						
February	0.064	0.161	0.181	1,850,200	1,850,200	-	\$ 13.39	\$ -	\$ 13.39	0.02	4.08	26.73	\$ 44.22	2,884,000	54.83	-10.61						
March	0.103	0.100	0.146	3,189,900	2,100,000	1,089,900	\$ 15.20	\$ 13.20	\$ 28.39	0.02	4.08	26.73	\$ 59.23	3,193,000	59.26	-0.03						
April	0.068	0.134	0.101	2,046,000	2,046,000	-	\$ 14.81	\$ -	\$ 14.81	0.02	4.08	26.73	\$ 45.64	2,040,000	45.59	0.05						
May	0.066	0.094	0.098	2,055,300	2,055,300	-	\$ 14.87	\$ -	\$ 14.87	0.02	4.08	26.73	\$ 45.70	2,046,000	45.64	0.06						
June	0.091	0.069	0.072	2,736,000	2,100,000	636,000	\$ 15.20	\$ 7.70	\$ 22.90	0.02	4.08	26.73	\$ 53.73	2,730,000	53.66	0.07						
July	0.095	0.083	0.082	2,951,200	2,100,000	851,200	\$ 15.20	\$ 10.31	\$ 25.50	0.02	4.08	26.73	\$ 56.34	2,945,000	56.26	0.08						
August	0.104	0.083	0.127	3,230,200	2,100,000	1,130,200	\$ 15.20	\$ 13.69	\$ 28.88	0.02	4.08	26.73	\$ 59.71	3,224,000	59.64	0.07						
September	0.098	0.095	0.095	2,925,000	2,100,000	825,000	\$ 15.20	\$ 9.99	\$ 25.19	0.02	4.08	26.73	\$ 56.02	2,940,000	56.20	-0.18						
October	0.066	0.094	0.106	2,052,200	2,052,200	-	\$ 14.85	\$ -	\$ 14.85	0.02	4.08	26.73	\$ 45.68	2,046,000	45.64	0.04						
November	0.074	0.079	0.073	2,205,000	2,100,000	105,000	\$ 15.20	\$ 1.27	\$ 16.47	0.02	4.08	26.73	\$ 47.30	2,220,000	47.48	-0.18						
December	0.088	0.068	0.083	2,724,900	2,100,000	624,900	\$ 15.20	\$ 7.57	\$ 22.76	0.02	4.08	26.73	\$ 53.59	2,728,000	53.63	-0.04						
AVERAGE	0.081	0.097	0.112	29,798,000	24,535,800	5,262,200	\$ 14.80	\$ 5.31	\$ 20.11	\$ 0.02	\$ 4.08	\$ 26.73	\$ 50.94			\$ (10.65)						
LOWEST MONTHLY AVG	0.059	0.068	0.072													\$ (0.89)						

2013	2012			2011			2010			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	MoVolum	Tier I vol	(A) - (B) Tier II vol	250 units T I cost	250 units TII cost	(D) + (E) TI + TII	250 units CustChg	250 units AvailCh	Flat Rate CollSyst	Total	GC Worksheet MoFlow	Cust Cost	Difference									
January	0.206			6,386,000	2,100,000	4,286,000	\$ 16.72	\$ 57.09	\$ 73.81	0.02	4.49	26.73	\$ 105.05									
February	0.133			3,724,000	2,100,000	1,624,000	\$ 16.72	\$ 21.63	\$ 38.35	0.02	4.49	26.73	\$ 69.59									
				3,189,900	2,100,000	1,089,900	\$ 16.72	\$ 14.52	\$ 31.23	0.02	4.49	26.73	\$ 62.48									
				2,046,000	2,046,000	-	\$ 16.29	\$ -	\$ 16.29	0.02	4.49	26.73	\$ 47.53									
				2,055,300	2,055,300	-	\$ 16.36	\$ -	\$ 16.36	0.02	4.49	26.73	\$ 47.60									
				2,736,000	2,100,000	636,000	\$ 16.72	\$ 8.47	\$ 25.19	0.02	4.49	26.73	\$ 56.43									
				2,951,200	2,100,000	851,200	\$ 16.72	\$ 11.34	\$ 28.05	0.02	4.49	26.73	\$ 59.30									
				3,230,200	2,100,000	1,130,200	\$ 16.72	\$ 15.05	\$ 31.77	0.02	4.49	26.73	\$ 63.01									
				2,925,000	2,100,000	825,000	\$ 16.72	\$ 10.99	\$ 27.71	0.02	4.49	26.73	\$ 58.95									
				2,052,200	2,052,200	-	\$ 16.34	\$ -	\$ 16.34	0.02	4.49	26.73	\$ 47.58									
				2,205,000	2,100,000	105,000	\$ 16.72	\$ 1.40	\$ 18.11	0.02	4.49	26.73	\$ 49.36									
				2,724,900	2,100,000	624,900	\$ 16.72	\$ 8.32	\$ 25.04	0.02	4.49	26.73	\$ 56.28									
TOTAL				36,225,700	25,053,500	11,172,200																
AVERAGE							\$ 16.62	\$ 12.40	\$ 29.02	\$ 0.02	\$ 4.49	\$ 26.73	\$ 60.26									

BEFORE

THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA

DOCKET NO. 2000-511-S - ORDER NO. 2001-360

APRIL 18, 2001

IN RE: Petition of Carolina Water Service, Inc. for)	ORDER DENYING
Approval of an Agreement with Georgetown)	APPROVAL OF
County Water and Sewer District for Bulk)	CONTRACT
Sewer Collection Services.)	

This matter comes before the Public Service Commission of South Carolina (the Commission) on the Petition of Carolina Water Service, Inc. (CWS or the Company) for approval of an agreement with the Georgetown County Water and Sewer District for bulk service collection from the Lincolnshire and Whites Creek Subdivisions' (collectively LWC) sewerage collection facilities located in Georgetown County, South Carolina.

Pursuant to the instructions of the Commission's Executive Director, the Company published a Notice of Filing in newspapers of general circulation in the Company's service area, and furnished a copy of the Notice to each affected customer. The Company furnished affidavits to show that it had complied with the instructions of the Executive Director. Petitions to Intervene were filed by the Consumer Advocate for the State of South Carolina (the Consumer Advocate) and the South Carolina Department of Health and Environmental Control (DHEC).

DOCKET NO. 2000-511-S – ORDER NO. 2001-360

APRIL 18, 2001

PAGE 2

A night hearing on the matter was held on March 29, 2001 in Georgetown, South Carolina, so that the affected members of the public could express their views on the matter.

A hearing was also held in the offices of the Commission at 101 Executive Center Drive, Columbia, South Carolina on April 5, 2001 at 10:30 AM. The Honorable William Saunders, Chairman, presided at both hearings. On April 5, 2001, the Company was represented by William F. Austin, Esquire, and E. Crosby Lewis, Esquire. CWS presented the testimony of David Carter, Robert G. Burgin, Jr., and Gary D. Shambaugh. The Consumer Advocate was represented by Elliott F. Elam, Esquire, and DHEC was represented by Samuel L. Finklea, III, Esquire. Neither the Consumer Advocate, nor DHEC presented any witnesses. The Commission Staff (the Staff) was represented by F. David Butler, General Counsel. The Staff presented the testimony of Charles A. Creech.

CWS first presented the testimony of David Carter, Vice-President of Utilities, Inc., who presented the extensive background and history of the case. According to Carter, CWS has been providing retail sewer service to the LWC areas for approximately twenty-five (25) years. In the early 1970's, comprehensive area wide wastewater management plans were developed, which shall herein be referred to as 208 Plans. The 208 Plans provide information on any activity that can affect water quality. The part of the 208 Plan addressing wastewater collection and treatment facilities is known as the 201 Facilities Plan.

The LWC facilities are located within the Waccamaw Regional Planning and Development Council's (Waccamaw's) areawide wastewater management plan. In the

DOCKET NO. 2000-511-S – ORDER NO. 2001-360

APRIL 18, 2001

PAGE 3

original 201 Plan for the City of Georgetown, the LWC wastewater treatment plant was to be eliminated, and the LWC collection system's wastewater was to be sent to the City of Georgetown for treatment at its wastewater treatment plant. A new 201 Plan was proposed in 1988. Based on the 201 and 208 Plans, DHEC added a condition to the LWC wastewater treatment plant's National Pollutant Discharge Elimination System Permit (NPDES Permit) that required CWS to interconnect with the regional system once it became available. In 1992, to eliminate the DHEC interconnection condition, CWS formally requested Waccamaw to amend the 208 Plan to allow the LWC wastewater treatment plant to be upgraded and to remain in operation; however, this amendment request was never acted upon. In 1993, CWS and DHEC entered into a Consent Order in which CWS obligated itself to negotiate with the Georgetown County Water and Sewer District (the District) for the purpose of reaching an agreement that would allow CWS (either through conveyance or bulk service) to interconnect its LWC collection system with the District's regional line. According to Carter, during these negotiations, CWS offered to give the LWC system to the District at no cost, and when this proposal was rejected, further proposed to pay to the District \$100,000 to take the system. The District rejected these offers and demanded that CWS give it the system and \$150,000, or accept its bulk service proposal. CWS was unable to reach an agreement with the District, and DHEC issued an administrative order, which CWS contested. Further, according to Carter, during 2000, the DHEC Board issued an Order that CWS is currently appealing to the circuit court.

DOCKET NO. 2000-511-S – ORDER NO. 2001-360

APRIL 18, 2001

PAGE 4

Robert G. Burgin, Jr. also testified for CWS. Burgin noted that the 208 Plan amendment called for the elimination of the Lincolnshire/Whites Creek wastewater treatment plant owned by CWS by allowing for the connection of the LWC collection facilities to the District's system. Burgin stated that, in his opinion, the LWC wastewater treatment plant could be upgraded to meet the stream standards that he believes would be imposed by DHEC for less capital expense and operation costs than those that would be associated with the connection of the LWC facilities to the District's system for wholesale sewer service. The upgrade would allow CWS to serve its existing customers, and also allow for new customers, in Burgin's opinion.

Burgin noted that CWS did not directly agree to participate in the 208 Plan. Burgin states that the original estimated fees and volume charges, though slightly higher were thought to be affordable. CWS did accept a modification to the NPDES permit that called for connection to the 208 Plan's regional system in 1988, however, Burgin notes that CWS could not have anticipated that much higher rates would be proposed by the District than the fees proposed by the City of Georgetown in the original 208 Plan. CWS states a belief, through Burgin, that the original economic analysis proposing that the LWC facilities be connected to the City of Georgetown in the original 208 Plan was flawed, and the analysis should have provided that CWS continue operation of the LWC wastewater treatment plant. CWS also believes that the 208 Plan was amended improperly in 1988, in that no new economic analysis was completed to justify revising the plan to allow for the elimination of the LWC treatment plant and the transportation of the LWC customers' wastewater to the District, instead of the City of Georgetown.

DOCKET NO. 2000-511-S – ORDER NO. 2001-360

APRIL 18, 2001

PAGE 5

According to Burgin, CWS has taken all actions available to comply with its NPDES Permit, including a request to DHEC to upgrade the LWC wastewater facility. Further, CWS has apparently endeavored, since 1988, to get permission to upgrade the facility so as to stay in compliance with its permit. DHEC has denied these requests.

Burgin also discusses the matter of infiltration and inflow associated with the LWC system, and states that these are not excessive, given the age of the sewer collection system. However, CWS is currently planning to install manhole cover inserts in all of the manholes in the system to reduce cover leakage due to surface water ponding over the manholes.

Gary D. Shambaugh, Executive Vice President of AUS Consultants, also testified for CWS. In this proceeding, AUS was retained by CWS to review the reasonableness of the proposed wholesale rate to be charged to the Company's Lincolnshire/Whites Creek System customers as a result of the proposed agreement between CWS and the District. Shambaugh reviewed three options: 1) Conveying the wastewater directly to the City of Georgetown's wastewater treatment facility; 2) Conveying the wastewater to the Georgetown County Water & Sewer District; and 3) the rehabilitation of Carolina Water Service's treatment plant.

With regard to Option 1, the original plan was for CWS to remove their wastewater treatment plant from service and convey the wastewater generated in the LWC area directly to the City of Georgetown's wastewater treatment facility. Shambaugh's analysis revealed that the total monthly cost increase to the LWC

customers would be \$64.30. This option was eliminated with the revision of the 201/208 Plan.

As regards Option 2, the revised 201/208 Plan designates the District as the regional provider of wastewater collection and transportation for treatment. Under the Plan, the City of Georgetown will still provide the wastewater treatment. The District requires a connection fee of \$178,215, which equates to approximately \$675 per current connected customer. Based on CWS' current tariff, this charge would be the direct responsibility of each Lincolnshire/Whites Creek customer. In addition, all wastewater flow would be treated at an average cost of approximately \$1.95 per 1,000 gallons. Each customer would also pay a monthly availability fee of \$5.74 and the Company would pay a monthly service charge of \$4.18 to the District. The monthly cost to each consumer would be \$50.96. In addition, if amortized, the cost of the recovery of the interconnection and customer connection fees will increase each customer's monthly bill to approximately \$69.54.

Shambaugh testified also about Option 3, the rehabilitation of the CWS treatment plant. Shambaugh maintains that Option 3 is the least-cost alternative. The witness states CWS' belief that an upgrade of the current facilities will solve the overall capacity and the treatment related problems. Shambaugh states that it appears that rejections of the alternative by regulatory agencies have not considered the economic impact to CWS' customers. Additional capacity will be available and all discharge permit requirements can apparently be satisfied as the result of the proposed upgrades, Shambaugh notes. The fixed capital cost of the upgrades, which will provide for tertiary treatment, will be in the

DOCKET NO. 2000-511-S – ORDER NO. 2001-360

APRIL 18, 2001

PAGE 7

range of \$270,000. The cost of the fixed capital upgrades will be absorbed by CWS' statewide customer base through that company's statewide tariff. Thus, the cost to each customer in the LWC area will be approximately \$0.263 per month.

It is also estimated that the cost of treatment will increase by \$1,796.60 per month. These costs will also be absorbed by CWS' entire customer base, therefore the LWC customers will pay an additional \$0.162 per month for the increased cost of operations.

Monthly statewide rates would increase by approximately \$.43 under Option 3. The current Commission-approved monthly rate for LWC customers and statewide is \$28.86. Shambaugh expresses the opinion that the customer rates generated by Option 2 are excessive and will create significant rate shock to the customers, and create financial instability for CWS. If Option 3 is adopted, the average customer's monthly bill will be \$29.29.

Shambaugh testified that the proposed Option 2 rates penalize the customers in the Lincolnshire/Whites Creek service area while providing no significant service benefit for the increased cost, and that he recommended that the agreement which contains these rates should be rejected as being unreasonable, unfair, unjust, and not in the public interest. Shambaugh further recommended that a modification to the 201/208 Plan be considered which would allow Option 3 to be employed as the desirable least-cost method for the continued wastewater service to the LWC area. The 201/208 Plan, according to Shambaugh, as it exists, is punitive to the Lincolnshire/Whites Creek customers to the benefit of the regional provider.

Charles A. Creech of the Commission Staff also testified. Creech recommended that this Commission not approve the contract between CWS and the District for the bulk treatment of wastewater service, because of the rate shock that would be imposed upon the customers in the LWC service area. If the contract was approved, an average monthly charge of \$52.59 would result, which is an increase of \$23.73 per month per customer. Creech stated his hope that the 208 Plan could be amended to allow the existing LWC sewer plant to be upgraded by CWS to meet DHEC standards, which would result in a lesser rate to CWS' customers.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. Carolina Water Service, Inc. has been providing retail sewer service to the Lincolnshire and Whites Creek Subdivisions through a CWS treatment facility for approximately twenty-five (25) years. Testimony of Carter at 2.

2. Based on the 201 and 208 Plans, the South Carolina Department of Health and Environmental Control added a condition to the LWC wastewater treatment plant's NPDES Permit that required CWS to interconnect with the regional wastewater system once it became available. Testimony of Carter at 4.

3. In 1992, to eliminate the DHEC interconnection condition, CWS formally requested the governing authority, Waccamaw, to amend the 208 Plan to allow the LWC wastewater treatment plant to be upgraded and to remain in operation. This amendment was never acted upon. Id.

4. In 1993, CWS and DHEC entered into a Consent Order in which CWS obligated itself to negotiate with the Georgetown County Water and Sewer District for

DOCKET NO. 2000-511-S – ORDER NO. 2001-360

APRIL 18, 2001

PAGE 9

the purpose of reaching an agreement that would allow CWS (either through conveyance or bulk service) to interconnect its LWC collection system with the District's regional line. Id.

5. No agreement was reached between CWS and the District. DHEC issued an administrative order on the matter, which has been appealed to the circuit court. Testimony of Carter at 4-5.

6. The rate that would be charged to the individual customers upon approval of a contract between CWS and the District for bulk service would be excessive and would cause "rate shock" among the people of the Lincolnshire and Whites Creek Subdivisions. The evidence in this case shows that if the contract was approved, an average monthly charge of \$52.59 would result, which is an increase of \$23.73 per month per customer. If the present CWS LWC wastewater facility was upgraded, monthly statewide rates would increase by approximately \$.43. Testimony of Creech at 1; Testimony of Shambaugh at 8.

7. 26 S.C. Regs. 103-541 states that no utility shall execute or enter into any agreement or contract with any person, firm, partnership, or corporation or any agency of the Federal, State or local government which would impact, pertain to, or effect said utility's fitness, willingness, or ability to provide sewer service, including but not limited to the collection or treatment of said sewerage, without first submitting said contract in form to the Commission and obtaining approval of the Commission. We find that the proposed contract before us at this time is a contract of the type requiring approval under this Commission regulation.

DOCKET NO. 2000-511-S – ORDER NO. 2001-360

APRIL 18, 2001

PAGE 10

8. We find that approval of this contract would cause major “rate shock” among the people living in the Lincolnshire and Whites Creek Subdivisions of Georgetown County. Accordingly, approval of the contract is denied as being against the public interest of the citizens in these areas. It appears from the evidence that no appropriate financial analysis was carried out by any governmental agency prior to amending the 201/208 Plan to require connection of the CWS facility with the District. The financial consequences of approving this contract would be dire for the citizens living in the areas. It was clear from the testimony of the citizens at both the night hearing and the later hearing that said citizens could ill afford to pay the rates which would result from approval of the proposed contract. We cannot in good conscience approve a contract which would obviously cause such devastating economic effects on the target citizens, especially when an economically favorable solution to the situation is available.

9. Although we have no jurisdiction over the 201/208 Plan itself, we would urge the responsible governmental agencies to reexamine this matter, with the aim of amending the plan to allow CWS wastewater facility serving Lincolnshire and Whites Creek to be upgraded, and to remain in operation. Such a solution certainly comports with the economic needs of the citizens of those areas, and appears to be workable.

DOCKET NO. 2000-511-S – ORDER NO. 2001-360

APRIL 18, 2001

PAGE 11

10. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Chairman

ATTEST:

Executive Director
(SEAL)